CLAIMS:

1. A method of encoding (1) an audio signal (x), the method comprising the steps of:

estimating (110) a position of a transient signal component in the audio signal;

matching (111,112) a shape function on the transient signal component in case the transient signal component is gradually declining after an initial increase, which shape function has a substantially exponential initial behavior and a substantially logarithmic declining behavior; and

including (15) the position and shape parameters describing the shape function in an audio stream (AS).

2. A method as claimed in claim 1, wherein the shape function is a Laguerre function or a generalized discrete Laguerre function.

3. A method as claimed in claim 2, wherein shape function is a Meixner function or a Meixner-like function.

4. A method as claimed in claim 2, wherein at least one of the shape parameters is determined by a ratio of slopes of running first and a second order moments of the audio signal (x).

5. A method as claimed in claim 1, wherein the shape parameters include a step indication in case the transient signal component is a step-like change in amplitude.

6. A method as claimed in claim 1, wherein the position of the transient signal component is a start position.

7. A method as claimed in claim 1, the method further comprising:

flattening a part of the audio signal that is furnished to at least one sustained coding stage by using the shape function in a gain control mechanism.

8. Method of decoding an audio stream, the method comprising the steps of:

generating (31) a transient signal component at a given position; and

calculating (31) a shape function based on received shape parameters, which shape function has a substantially exponential initial behavior and a substantially logarithmic declining behavior.

9. Audio coder (1), comprising:

means for estimating (110) a position of a transient signal component in the audio signal;

means for matching (111,112) a shape function on the transient signal component in case the transient signal component is gradually declining after an initial increase, which shape function has a substantially exponential initial behavior and has a substantially logarithmic declining behavior; and

means for including (15) the position and shape parameters describing the shape function in an audio stream (AS).

10. Audio player (3), comprising

means for generating (31) a transient signal component at a given position; and

means for calculating (31) a shape function based on received shape parameters, which shape function has a substantially exponential initial behavior and a substantially logarithmic declining behavior.

11. Audio system comprising an audio coder (1) as claimed in claim 9 and an audio player (2) as claimed in claim 10.

12. Audio stream (AS) comprising:

a position of a transient signal component; and

shape parameters describing an shape function which shape function has a substantially exponential initial behavior and a substantially logarithmic declining behavior.

13. Storage medium (2) on which an audio stream (AS) as claimed in claim 12 has been stored.